

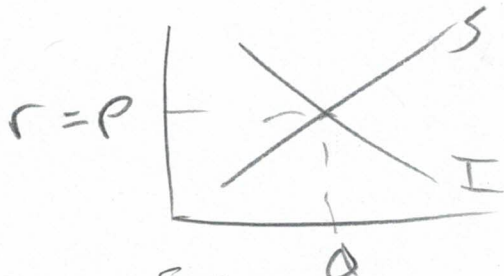
The Loanable Funds Market

→ For Open Economies

①

$$Y = C + I + G + NX + T - T \rightarrow S - I = NX$$

① Closed Economy, $S = S(r)$ $S' > 0$
 $I = I(r)$ $I' < 0$



$$NX = 0$$

$$I = f \left[\int_0^{\infty} \left(\int_{-\infty}^{+\infty} (R - c)_i p_i d_i \right) e^{-\rho t} dt \right] \triangleq f(\pi^e)$$

$(R(t) - c(t))_i p_i(t) d_i$

$$S = S^p + S^g$$

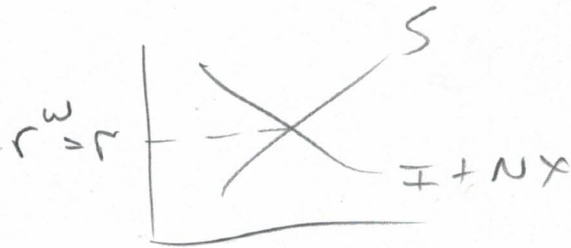
Experiments

- ① Cons Optimism / Pessimism
- ② Investor " / "
- ③ General Opt / Pess
- ④ ΔG } a) How does balanced budget amendment affect this?
- ⑤ ΔT } b) Crowding out

(2) Open Economy

(2a) Large Open Economy

$$S - I = NX \rightarrow S = I + \bar{NX} \quad \bar{NX} \text{ exog.}$$



Now $r \Rightarrow r^{ROW}$
Large

Experiments

1 - S

(6) $\uparrow NX$

(7) $\downarrow NX$

easiest to start w/ assumption
 $NX = 0$

(2b) Twin Deficit Hypothesis

H_0 : "Gov Deficit CAUSES trade deficits"
~~and sometimes they say "vice versa"~~

When is this true

$$S - \bar{I} = NX$$

$$\text{Sppe } NX = 0 \Rightarrow S = \bar{I}, \text{ Sppe } G = \bar{T}$$

$$\text{now } \uparrow G \Rightarrow \downarrow S^G$$

$$\text{if } I = \bar{I}, \cancel{T = \bar{T}}, \text{ then } \downarrow S = \bar{I} + NX$$

Deficit

but this is ONLY true if

$C = \bar{C}$
 $I = \bar{I}$
 $Y = \bar{Y}$ } these are both sensitive to Expectations.

Why would $\downarrow S^G / \begin{matrix} \bar{S}^G \\ \bar{I} \end{matrix} \Rightarrow \downarrow NX$?

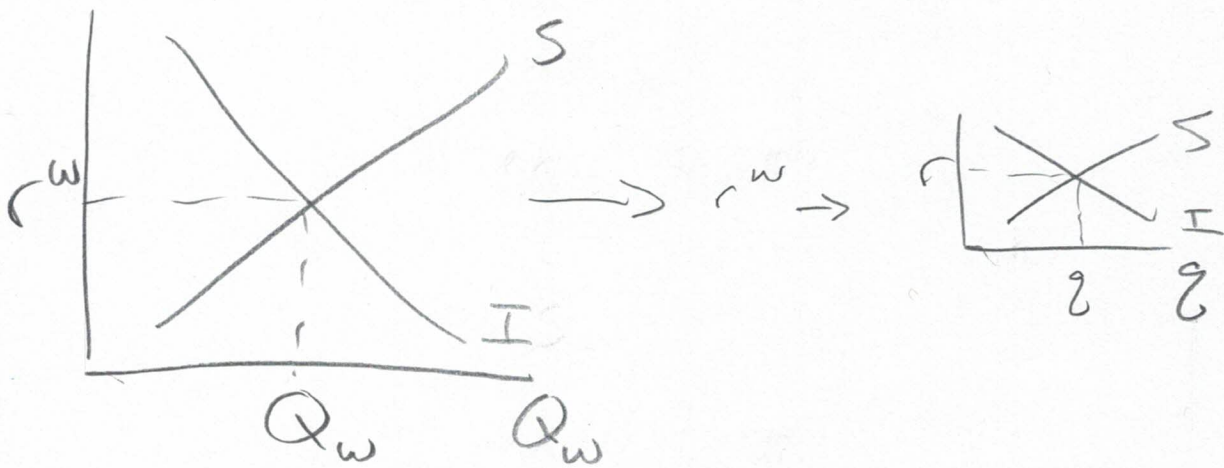
(2)

$\uparrow G$ means buy more stuff by $Y = \bar{Y}$
and initially $S = \bar{I}$ so everything
is allocated $\dagger S = D$ \forall markets

Then you can only $\uparrow G$ by buying those
extra goods / services from foreigners
so $\uparrow IM$ but $EX = \bar{EX}$

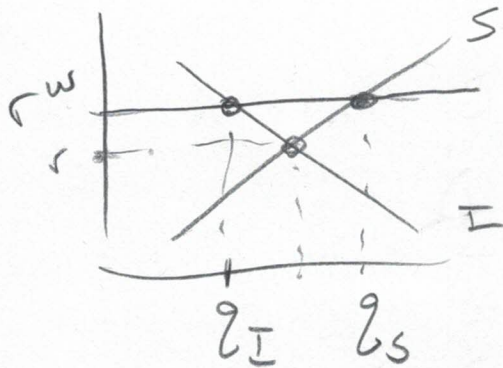
③ Small Open Economy

④



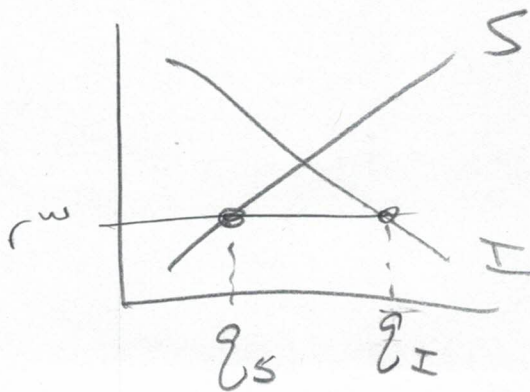
Case (1) $r^w = r \Rightarrow S = I \Rightarrow NX = 0$

Case (2) $r^w > r$



$S > I \Rightarrow NX > 0$ Trade Surplus

Case (3) $r^w < r$



$S < I \Rightarrow NX < 0$

Trade Deficit